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California HIV/AIDS Update

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HIV Prevalence Estimates for California, 1996

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Introduction

Estimating the number of persons living with human immunodeficiency virus (HIV) is essential in developing HIV prevention strategies and predicting future HIV-related medical, social, and public health resource needs. Studies have estimated HIV prevalence in California at 145,900 in 1990 and 130,000-175,000 in 1994.[1,2] Based on a recent study, the national estimated plausible range of HIV prevalence as of January 1993 was 650,000-900,000.[3] This range of prevalence is consistent with several other recent studies.[4,5] This article updates previous California HIV prevalence estimates[2] utilizing more recent acquired immunodeficiency syndrome (AIDS) surveillance data and data from the survey of childbearing women (SCBW).

Methods

We employed two methods to estimate HIV prevalence in California.[5] The first method is based on the 1990-1995 SCBW data and AIDS case surveillance data reported as of October 1996 in California. The second method extrapolates from the national HIV prevalence estimate and utilizes the California and national AIDS case surveillance data reported as of October 1996. We estimated the plausible range of HIV prevalence in California derived from these two methods. The specifics of these two methods for estimating California HIV prevalence are presented below.

Method 1. Estimation Based on SCBW

From 1988 through 1995, the California Department of Health Services, Office of AIDS, in collaboration with the Genetic Disease Branch and the Viral and Rickettsial Disease Laboratory

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conducted the SCBW in California to estimate the prevalence of HIV infection among childbearing women. This survey was sponsored by the Centers for Disease Control and Prevention (CDC) and the National Institute of Child Health and Human Development. We used the prevalence of HIV infection among women giving birth to live-born infants from the SCBW to estimate the prevalence of HIV infection among all women. We estimated the prevalence of HIV infection among all men by taking into account an estimate of the male-to-female ratio of HIV infection approximated from California AIDS surveillance data.

We derived age group-, racial/ethnic-, and county-specific estimates of seroprevalence among women of childbearing age using SCBW data stratified by age group (<20, 20-24, 25-29, 30-34, >35), race/ethnicity (White, African American, Hispanic, and Other), and county. We used age group-, racial/ethnic-, and county-specific population projection estimates for the years 1990 through 1995 (from the California Department of Finance) to estimate the adjusted HIV prevalence among childbearing women. The average of the last three years of these estimates was chosen as the most plausible estimate. We adjusted this estimate to include women older or younger than the childbearing age range. This adjustment takes into account the proportion of all female AIDS cases diagnosed among women of childbearing age in 1993-1995.

We added an estimate of the number of living HIV-infected women diagnosed with AIDS opportunistic infections (AIDS-OIs) to the above estimate to obtain the estimate of HIV prevalence among all women living in California. The CDC used the Adult Spectrum of Disease Project data to estimate the number of AIDS-OIs.[6] The AIDS-OI estimate is based on the probability distribution of the time from a CD4+ count in given ranges to the diagnosis of the first AIDS-OI. We used the PRODAS Reporting Delay and Adjustment Incidence program provided by the CDC to obtain the cumulative number of diagnosed AIDS-OIs (adjusted for reporting delays) and subtracted the reporting-delay-adjusted cumulative number of deaths in women as of January 1, 1996, using AIDS surveillance data reported as of October 1996. The difference was divided by 0.85 to account for the incompleteness of AIDS-OI reporting in women.

We estimated HIV prevalence among men who have not had an AIDS-OI diagnosis by multiplying the estimate of HIV prevalence among women with no AIDS-OI diagnosis by the proportion of the male-to-female ratio of AIDS cases diagnosed in 1993-1995 and reported through October 1996. We employed a 3-year moving average procedure to obtain the most plausible estimate of the male-to-female ratio. Due to a steadily decreasing trend in the male-to-female ratios for the years 1990-1995, we adopted the proportion derived from the average of the last three years for this estimate. This estimate was combined with the prevalence of AIDS-OIs among men (derived similar to women and adjusted for incompleteness) to obtain the estimated number of men living with HIV/AIDS in California.

Method 2. Extrapolation from the National Estimates

We multiplied the national prevalence estimate (650,000-900,000)[3] by the proportion of cases that California has contributed to the national AIDS surveillance data to obtain the HIV prevalence estimate for California. Estimating this proportion involved examining trends in the proportion of AIDS and AIDS-OIs incidence. Both proportions for the years 1993-1995 were derived from national and California AIDS surveillance data reported as of October 1996 and adjusted for reporting delays. The proportion of all AIDS cases that California contributed to the national AIDS case total in 1993-1995 was chosen as the most plausible estimate.

We estimated HIV prevalence for each county, sex, race/ethnicity, and mode of exposure by multiplying the plausible California prevalence estimate derived from the above mentioned methods by the proportion of cases that each county, sex, race/ethnicity, and mode of exposure contributed to total California AIDS cases over the years 1993-1995. We used chi-square tests[7] to examine trends over time in share of AIDS incidence for different counties, modes of exposure, and races/ethnicities over the years 1992-1995.

Results

Table 1 presents the 3-year moving average of the estimated HIV prevalence among childbearing women (age group-, racial/ethnic-, and county-adjusted), and AIDS incidence among men, women, and women of childbearing age in California for the years 1990-1995. While the estimated HIV prevalence among childbearing women was rather stable, the AIDS incidence among all women and women of childbearing age increased steadily over the years 1990-1995. This steady increase among females and the moderate

Table 1. Three-year moving average of HIV prevalence among childbearing women and AIDS incidence among women, women of childbearing age, and men in California for the years 1990-1995.

Interval Years (Diagnosis)	HIV Prevalence among Childbearing Women*	AIDS Incidence among Women	AIDS Incidence among Women of Childbearing Age (Proportion of All Women)	AIDS Incidence among Men (male:female ratio)
1990-1992	5,220	668	519 (0.78)	10,419 (15.60)
1991-1993	5,071	853	665 (0.78)	11,416 (13.38)
1992-1994	5,006	963	746 (0.78)	11,164 (11.59)
1993-1995	4,983	977	744 (0.76)	9,753 (9.98)

AIDS cases reported as of October 1996.
*Age group-, racial/ethnic-, and county-adjusted estimates of seroprevalence among childbearing women.

decrease among males contributed to the declining trend in the male-to-female ratio. Taking this time trend into consideration, we chose the 3-year average of 1993-1995 as the most plausible estimate. This led to a point estimate of HIV prevalence of 97,300 (88,600 males, 8,700 females) as of January 1, 1996.

Table 2 presents the national (John Karon, Ph.D. CDC, unpublished data, 1997) and California reporting-delay-adjusted AIDS and AIDS-OI incidence and the proportion of all AIDS and AIDS-OI cases that California contributed to the national AIDS and AIDS-OI case totals in 1993-1995. The California trends in AIDS and AIDS-OI incidence closely followed the national trends in 1993-1995. We chose the 3-year average of the proportion of national AIDS cases from California (0.145) as the most plausible estimate of the proportion of HIV infections in California.

Table 3 presents gender-, race/ethnicity-, and mode of exposure-specific HIV prevalence estimates for California. The percentage contribution of each group is obtained by the 3-year average of AIDS cases diagnosed in 1993-1995 and reported as of October 1996. Males, Whites, and gay/bisexuals composed the majorities in the respective groups.

Table 4 presents the county-specific lower and upper bounds of HIV prevalence and percent of population living with HIV or AIDS. The highest prevalences were in Los Angeles (32,900-45,600), San Francisco (16,800-23,200), San Diego (8,900-12,300), Alameda (4,600-6,400) and Orange (4,600-6,400) Counties. These counties constituted 72% of the total HIV prevalence in California. San Francisco had the highest percentage (2.2-3.1) of the population living with HIV or AIDS. The other counties with more than 0.2% of the population living with HIV or AIDS were Marin (0.6-0.8), Alameda (0.3-0.5), Los Angeles (0.3-0.5), San Diego (0.3-0.4), and Sonoma (0.3-0.4).

Table 2. Estimated AIDS and AIDS-OI incidence in the United States and California in 1993-1995.

	United States		California	
Year of Diagnosis	AIDS Incidence	AIDS-OI Incidence	AIDS Incidence (Proportion of National)	AIDS-OI Incidence (Proportion of National)
1993	78,975	58,528	12,167 (0.154)	8,972 (0.153)
1994	72,417	61,740	10,461 (0.144)	9,432 (0.153)
1995	70,472	62,947	9,562 (0.136)	9,197 (0.146)
3-Year Average	73,955	61,072	10,730 (0.145)	9,200 (0.151)

Based on data reported as of October 1996.

Table 3. Plausible ranges of HIV prevalence in California by demographics and modes of exposure on January 1, 1996.

	Ranges of HIV Prevalence	
	Low[a]	High[a]
California	**94,300**	**130,500**
Gender		
Male	85,000	117,600
Female	9,300	12,900
Race/Ethnicity		
White	53,000	73,300
African American	17,900	25,000
Latina/o	20,600	28,000
Asian/Pacific Islander	2,200	3000
Native American	500	700
Other	100	500
Modes of Exposure		
Gay/Bisexual	63,600	88,000
Injection Drug User (IDU)	12,000	16,700
Gay/Bisexual IDU	7,300	10,000
Heterosexual Contact	5,200	7,200
Other	6,200	8,600

[a] Rounded to the nearest 100.

Figure 1 displays the upper range estimates of HIV prevalence by county.

Chi-square tests for trends over time in share of AIDS incidence for all counties, races/ethnicities, and modes of exposure suggested the following results. For the counties with more than four cases in each of the years 1992-1995, an increasing trend was found for Fresno, Imperial, Kern, Los Angeles, San Diego, Tuolumne, and Yolo Counties. A decreasing trend was found for Riverside, Sacramento, and San Francisco Counties. There were also increasing trends for injection drug users, heterosexuals, African Americans, Latinas/os, and Native Americans. Trends were statistically significant at the 0.05 level.

Discussion

This study used two techniques to estimate HIV prevalence in California: analyzing the population-based SCBW, and extrapolating from the national estimates. The estimates obtained from these two methods were in agreement. However, there are certain assumptions and cautionary notes intrinsic in these methods which may affect the results.

Using the SCBW data presents two possible sources of bias. First, the method assumes that the fertility rate is the same among HIV-positive and HIV-negative women, which may not be the case in certain populations. However, the method allows for adjustments due to infertility among HIV-positive women who have already developed AIDS-OIs. A recent study found that new pregnancies were significantly less likely to occur among women with an AIDS-OI.[8] The second possible source of bias is in estimating male HIV prevalence by extrapolating from the HIV prevalence among childbearing women. The male-to-female ratio based on AIDS data is taken as a proxy of the male-to-female ratio of HIV infection. The direction of this bias depends on how closely the sex ratio of AIDS cases represents the sex ratio of HIV infection.

The second method of estimation assumes California's contribution to the national AIDS surveillance data as a proxy for the State's contribution to national HIV incidence. In addition, this method assumes that the proportion of cases contributed by California has remained approximately constant over time.

The estimates we derived for different counties are based on the general assumption that their contribution to California's recent HIV incidence is as their contribution to state AIDS case totals during 1993-1995. There are possible variations between counties in terms of reporting delays, completeness of reporting, migration, or prison population which could result in differences between these estimates and local estimates. Counties with an increasing share of California AIDS cases over time may have higher HIV prevalence than presented here. In terms of prison population, San Luis Obispo (n=39, 71.8%), Solano (n=105, 56.2%), San Bernardino (n=195, 15.4%), and Marin (n=133, 32.3%) Counties had more than 20 total AIDS cases and more than 15% of their cases from correctional facilities in 1995.

The estimates presented in this article are slightly lower than those given in 1990 and 1994,[1,2] which accords with the recent decline in the national HIV prevalence estimate.[3,4,5] This decline could partially be due to the State's campaign of targeted education and prevention. However, the present number of infected individuals in the State and the increasing trends of AIDS among females,[10,11] people of color,[11,12] injection drug users,[13] and young gay/bisexuals[14] deserves attention in terms of preventive measures and health resources utilization.

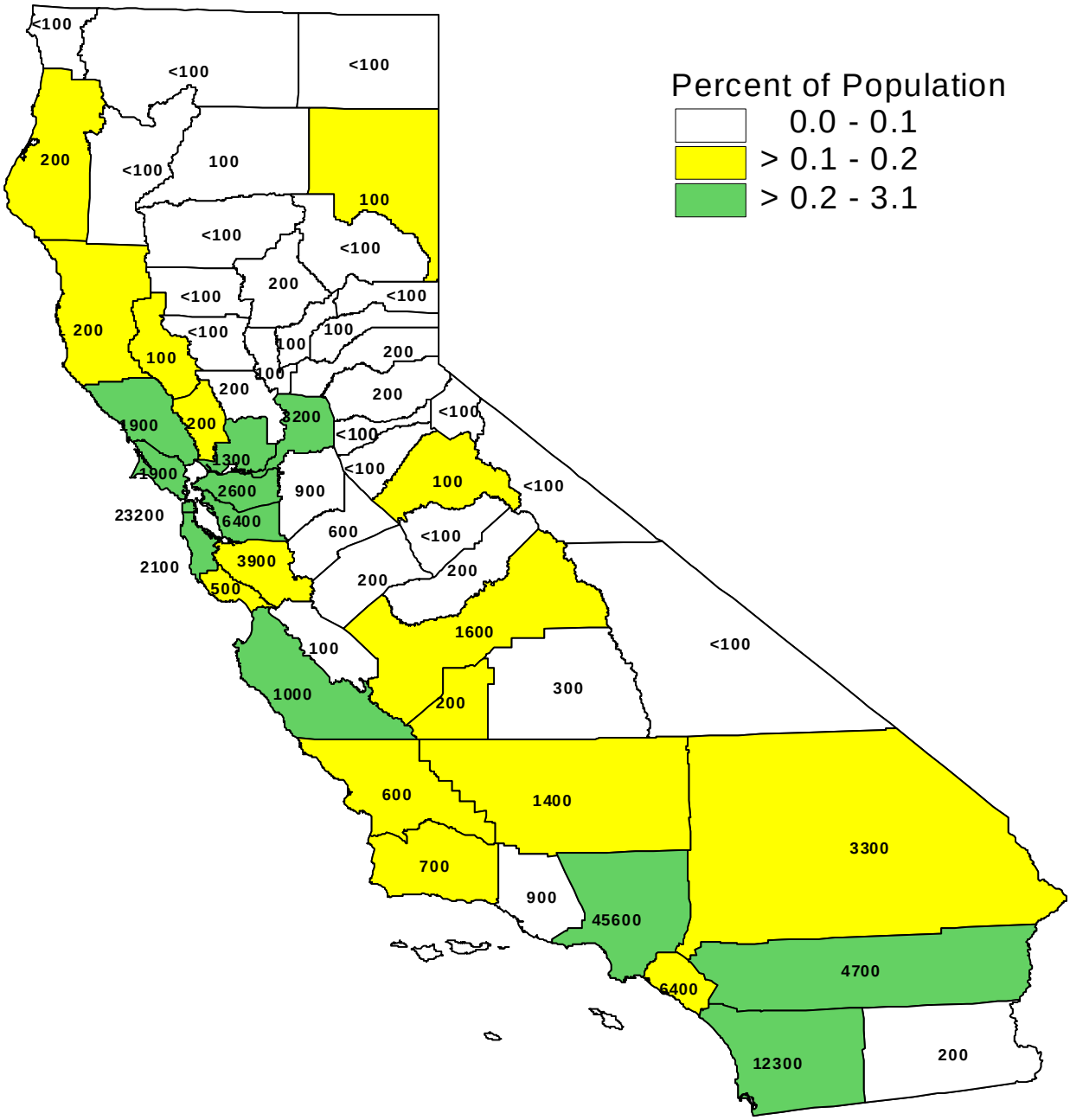
Table 4. Plausible ranges of the number of persons and percent of population living with HIV or AIDS in California counties on January 1, 1996.

	HIV Prevalence		Percent of Population*			HIV Prevalence		Percent of Population*	
County	**Low[a]**	**High[a]**	**Low[a]**	**High[a]**	**County**	**Low[a]**	**High[a]**	**Low[a]**	**High[a]**
LOS ANGELES	32,900	45,600	0.3	0.5	EL DORADO	100	200	0.1	0.1
SAN FRANCISCO	16,800	23,200	2.2	3.1	BUTTE	100	200	0.1	0.1
SAN DIEGO	8,900	12,300	0.3	0.4	KINGS	100	200	0.1	0.2
ALAMEDA	4,600	6,400	0.3	0.5	MERCED	100	200	0.1	0.1
ORANGE	4,600	6,400	0.2	0.2	PLACER	100	200	0.1	0.1
RIVERSIDE	3,400	4,700	0.2	0.3	MADERA	100	200	0.1	0.1
SANTA CLARA	2,800	3,900	0.2	0.2	LAKE	100	100	0.2	0.2
SAN BERNARDINO	2,400	3,300	0.1	0.2	TUOLUMNE	100	100	0.1	0.2
SACRAMENTO	2,300	3,200	0.2	0.3	NEVADA	100	100	0.1	0.1
CONTRA COSTA	1,900	2,600	0.2	0.3	YUBA	100	100	0.1	0.1
SAN MATEO	1,500	2,100	0.2	0.3	SHASTA	100	100	<0.1	<0.1
MARIN	1,400	1,900	0.6	0.8	LASSEN	<100	100	0.1	0.2
SONOMA	1,300	1,900	0.3	0.4	SUTTER	<100	100	0.1	0.1
FRESNO	1,100	1,600	0.1	0.2	SAN BENITO	<100	100	0.1	0.1
KERN	1,000	1,400	0.1	0.2	SISKIYOU	<100	<100	0.1	0.1
SOLANO	1,000	1,300	0.2	0.3	AMADOR	<100	<100	0.1	0.1
MONTEREY	700	1,000	0.2	0.3	DEL NORTE	<100	<100	0.1	0.1
SAN JOAQUIN	700	900	0.1	0.2	COLUSA	<100	<100	0.1	0.1
VENTURA	700	900	0.1	0.1	MARIPOSA	<100	<100	0.1	0.1
SANTA BARBARA	500	700	0.1	0.2	TRINITY	<100	<100	0.1	0.1
STANISLAUS	500	600	0.1	0.1	SIERRA	<100	<100	0.1	0.1
SAN LUIS OBISPO	400	600	0.2	0.2	TEHAMA	<100	<100	<0.1	0.1
SANTA CRUZ	400	500	0.2	0.2	INYO	<100	<100	<0.1	0.1
TULARE	200	300	0.1	0.1	PLUMAS	<100	<100	<0.1	<0.1
HUMBOLDT	200	200	0.1	0.2	CALAVERAS	<100	<100	<0.1	<0.1
NAPA	200	200	0.1	0.2	GLENN	<100	<100	<0.1	<0.1
YOLO	200	200	0.1	0.1	MONO	<100	<100	<0.1	<0.1
MENDOCINO	100	200	0.2	0.2	ALPINE	<100	<100	<0.1	<0.1
IMPERIAL	100	200	0.1	0.1	MODOC	<100	<100	<0.1	<0.1
					CALIFORNIA	**94,300**	**130,500**	**0.3**	**0.4**

[a] Rounded to the nearest 100.

* Using January 1, 1996 population estimates from the California Department of Finance.

Figure 1. Upper ranges of the number of persons and percent of population living with HIV or AIDS in California counties on January 1, 1996.



California's Upper HIV Prevalence Estimate: 130,500
California's Upper Percent of the Population Living with HIV or AIDS: 0.4

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HIV/AIDS News...

HIV Incidence and Prevalence in Large U.S. Metropolitan Areas

In a recent study published in the *American Journal of Public Health*, Scott D. Holmberg, M.D., M.P.H., estimates there are approximately 700,000 people living with HIV/AIDS and 41,000 incident HIV infections each year in the United States. Holmberg estimates that HIV prevalence rates in the 96 U.S. metropolitan areas with populations >500,000 range from 2.3% among at-risk heterosexuals (heterosexuals who have sex with injection drug users and heterosexual women who have sex with bisexual men) to 18.3% among men who have sex with men. By site, estimated prevalence rates in the 96 metropolitan areas ranged from 0.7% among at-risk heterosexuals in Gary, Indiana to 41.0% among injection drug users in New York City.

Holmberg estimates that roughly one-half of estimated new infections are occurring among injection drug users, primarily in northeastern cities, Miami, and San Juan.

Holmberg, SD. The Estimated Prevalence and Incidence of HIV in 96 Large US Metropolitan Areas. Am J Public Health, 1996;86:642-654.

Global HIV Incidence and Prevalence

According to the Joint United Nations Programme on HIV/AIDS, UNAIDS, there were more than 3.1 million new HIV infections worldwide during 1996 - 2.7 million among adults and 400,000 among children. New infections average about 8,500 per day - 7,500 among adults and 1,000 among children. The majority of newly infected adults are under 25 years of age. Nearly half of new infections in 1996 occurred among women.

Sub-Saharan Africa (5%) and the Caribbean (1.4%) have the highest rates of adult HIV prevalence. In 1994, adult HIV prevalence ranged from approximately 0.001% in the Central Asian Republics and the Democratic People's Republic of Korea to more than 10% in five African countries (Botswana, 18%; Zambia and Zimbabwe, 17%; Uganda, 15%; Malawi, 13%). Part of this disparity can be attributed to the maturity of the epidemic in parts of Africa and the relatively late introduction of HIV into Central and East Asia.

Source: UNAIDS web site at www.us.unaids.org.

Table 1. **AIDS cases by age group, exposure category, and gender reported January 1, 1995 through December 31, 1995 and January 1, 1996 through December 31, 1996; and cumulative totals by age group through December 31, 1996 in California.**

	Male		Female		Totals		
Adult/adolescent Exposure Category	**Jan. 1995-Dec. 1995 No. (%)**	**Jan. 1996-Dec. 1996 No. (%)**	**Jan. 1995-Dec. 1995 No. (%)**	**Jan. 1996-Dec. 1996 No. (%)**	**Jan. 1995-Dec. 1995 No. (%)**	**Jan. 1996-Dec. 1996 No. (%)**	**Cumulative Total No. (%)**
Homosexual/bisexual	6,917 (74)	6,036 (72)	-- (--)	-- (--)	6,917 (68)	6,036 (65)	71,306 (73)
IDU (heterosexual)	960 (10)	831 (10)	316 (35)	321 (36)	1,276 (12)	1,152 (12)	9,320 (10)
Homosexual/bisexual IDU	738 (8)	619 (7)	-- (--)	-- (--)	738 (7)	619 (7)	8,205 (8)
Lesbian/bisexual IDU	-- (--)	-- (--)	14 (2)	10 (1)	14 (--)	10 (--)	97 (--)
Coagulation Disorders	59 (1)	32 (--)	1 (--)	-- (--)	60 (1)	32 (--)	500 (1)
Heterosexual	163 (2)	141 (2)	438 (48)	374 (41)	601 (6)	515 (6)	3,519 (4)
Blood transfusion	50 (1)	46 (1)	48 (5)	30 (3)	98 (1)	76 (1)	1,486 (2)
Other/undetermined	435 (5)	622 (7)	97 (11)	167 (19)	532 (5)	789 (9)	3,329 (3)
Subtotal	9,322 (100)	8,327 (100)	914 (100)	902 (100)	10,236 (100)	9,229 (100)	97,762 (100)
Pediatric (<13 years old) Exposure Category	**Jan. 1995-Dec. 1995 No. (%)**	**Jan. 1996-Dec. 1996 No. (%)**	**Jan. 1995-Dec. 1995 No. (%)**	**Jan. 1996-Dec. 1996 No. (%)**	**Jan. 1995-Dec. 1995 No. (%)**	**Jan. 1996-Dec. 1996 No. (%)**	**Cumulative Total No. (%)**
Coagulation Disorders	1 (5)	1 (5)	-- (--)	-- (--)	1 (2)	1 (3)	29 (5)
Blood transfusion	2 (11)	-- (--)	-- (--)	-- (--)	2 (4)	-- (--)	109 (20)
Mother at risk: --IDU	5 (26)	5 (25)	10 (31)	1 (8)	15 (29)	6 (18)	138 (26)
--Sex with IDU	6 (32)	1 (5)	6 (19)	2 (15)	12 (24)	3 (9)	74 (14)
--Sex w/bisexual male	1 (5)	1 (5)	1 (3)	1 (8)	2 (4)	2 (6)	25 (5)
--Sex w/HIV infected	2 (11)	3 (15)	9 (28)	5 (38)	11 (22)	8 (24)	60 (11)
--Blood transfusion	-- (--)	1 (5)	1 (3)	3 (23)	1 (2)	4 (12)	20 (4)
--HIV infected	2 (11)	8 (40)	5 (16)	1 (8)	7 (14)	9 (27)	75 (14)
Other/undetermined	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)	5 (1)
Subtotal	19 (100)	20 (100)	32 (100)	13 (100)	51 (100)	33 (100)	535 (100)
TOTAL	**9,341**	**8,347**	**946**	**915**	**10,287**	**9,262**	**98,297**

Table 2. **AIDS cases by age group, exposure category, and race/ethnicity reported through December 31, 1996 in California.**

Adult/adolescent Exposure Category	White No. (%)	Black No. (%)	Hispanic No. (%)	Asian/ Pacific Is. No. (%)	Native American No. (%)	Not Specified No. (%)	TOTAL No. (%)
Homosexual/bisexual	49,561 (80)	8,076 (52)	11,890 (67)	1,429 (75)	227 (57)	123 (74)	71,306 (73)
IDU (heterosexual)	3,532 (6)	3,797 (24)	1,837 (10)	77 (4)	62 (16)	15 (9)	9,320 (10)
Homosexual/bisexual IDU	5,340 (9)	1,506 (10)	1,217 (7)	62 (3)	74 (19)	6 (4)	8,205 (8)
Lesbian/bisexual IDU	40 (--)	33 (--)	19 (--)	1 (--)	4 (1)	-- (--)	97 (--)
Coagulation Disorders	338 (1)	40 (--)	96 (1)	21 (1)	1 (--)	4 (2)	500 (1)
Heterosexual	1,326 (2)	1,096 (7)	971 (6)	108 (6)	15 (4)	3 (2)	3,519 (4)
Blood transfusion	876 (1)	167 (1)	330 (2)	107 (6)	2 (1)	4 (2)	1,486 (2)
Other/undetermined	1,003 (2)	943 (6)	1,259 (7)	99 (5)	13 (3)	12 (7)	3,329 (3)
Subtotal	62,016 (100)	15,658 (100)	17,619 (100)	1,904 (100)	398 (100)	167 (100)	97,762 (100)
Pediatric (<13 years old) Exposure Category	**White No. (%)**	**Black No. (%)**	**Hispanic No. (%)**	**Asian/ Pacific Is. No. (%)**	**Native American No. (%)**	**Not Specified No. (%)**	**TOTAL No. (%)**
Coagulation Disorders	16 (10)	1 (1)	10 (5)	2 (13)	-- (--)	-- (--)	29 (5)
Blood transfusion	40 (25)	23 (14)	39 (21)	7 (47)	-- (--)	-- (--)	109 (20)
Mother at risk: --IDU	49 (31)	65 (40)	20 (11)	-- (--)	4 (80)	-- (--)	138 (26)
--sex with IDU	17 (11)	19 (12)	36 (19)	1 (7)	1 (20)	-- (--)	74 (14)
--sex with bisexual male	7 (4)	4 (2)	13 (7)	1 (7)	-- (--)	-- (--)	25 (5)
--sex w/HIV infected	9 (6)	13 (8)	34 (18)	3 (20)	-- (--)	1 (100)	60 (11)
--blood transfusion	7 (4)	3 (2)	10 (5)	-- (--)	-- (--)	-- (--)	20 (4)
--HIV infected	14 (9)	35 (21)	25 (13)	1 (7)	-- (--)	-- (--)	75 (14)
Other/undetermined	1 (1)	1 (1)	3 (2)	-- (--)	-- (--)	-- (--)	5 (1)
Subtotal	160 (100)	164 (100)	190 (100)	15 (100)	5 (100)	1 (100)	535 (100)
TOTAL	**62,176**	**15,822**	**17,809**	**1,919**	**403**	**168**	**98,297**

Table 3. **Adult/adolescent AIDS cases by gender, exposure category, and race/ethnicity, reported through December 31, 1996 in California.**

Male Exposure Category	**White No. (%)**	**Black No. (%)**	**Hispanic No. (%)**	**Asian/ Pacific Is. No. (%)**	**Native American No. (%)**	**Not Specified No. (%)**	**TOTAL No. (%)**
Homosexual/bisexual	49,561 (83)	8,076 (60)	11,890 (73)	1,429 (83)	227 (64)	123 (76)	71,306 (78)
IDU (heterosexual)	2,630 (4)	2,751 (20)	1,516 (9)	51 (3)	38 (11)	11 (7)	6,997 (8)
Homosexual/bisexual IDU	5,340 (9)	1,506 (11)	1,217 (7)	62 (4)	74 (21)	6 (4)	8,205 (9)
Coagulation Disorders	324 (1)	38 (--)	94 (1)	21 (1)	1 (--)	4 (2)	482 (1)
Heterosexual	352 (1)	329 (2)	293 (2)	21 (1)	4 (1)	3 (2)	1,002 (1)
Blood transfusion	562 (1)	81 (1)	154 (1)	59 (3)	1 (--)	3 (2)	860 (1)
Other/undetermined	835 (1)	730 (5)	1,099 (7)	82 (5)	8 (2)	11 (7)	2,765 (3)
Subtotal	59,604 (100)	13,511 (100)	16,263 (100)	1,725 (100)	353 (100)	161 (100)	91,617 (100)

Female Exposure Category	**White No. (%)**	**Black No. (%)**	**Hispanic No. (%)**	**Asian/ Pacific Is. No. (%)**	**Native American No. (%)**	**Not Specified No. (%)**	**TOTAL No. (%)**
IDU	902 (37)	1,046 (49)	321 (24)	26 (15)	24 (53)	4 (67)	2,323 (38)
Lesbian/bisexual IDU	40 (2)	33 (2)	19 (1)	1 (1)	4 (9)	-- (--)	97 (2)
Coagulation Disorders	14 (1)	2 (--)	2 (--)	-- (--)	-- (--)	-- (--)	18 (--)
Heterosexual	974 (40)	767 (36)	678 (50)	87 (49)	11 (24)	-- (--)	2,517 (41)
Blood transfusion	314 (13)	86 (4)	176 (13)	48 (27)	1 (2)	1 (17)	626 (10)
Other/undetermined	168 (7)	213 (10)	160 (12)	17 (9)	5 (11)	1 (17)	564 (9)
Subtotal	2,412 (100)	2,147 (100)	1,356 (100)	179 (100)	45 (100)	6 (100)	6,145 (100)
TOTAL	**62,016**	**15,658**	**17,619**	**1,904**	**398**	**167**	**97,762**

Table 4. **AIDS cases in adolescents and adults under age 25, by exposure category reported January 1, 1995 through December 31, 1995 and January 1, 1996 through December 31, 1996; and cumulative totals by age group through December 31, 1996 in California.**

	13-19 years old			20-24 years old		
Exposure Category	**Jan. 1995-Dec. 1995 No. (%)**	**Jan. 1996-Dec. 1996 No. (%)**	**Cumulative Total No. (%)**	**Jan. 1995-Dec. 1995 No. (%)**	**Jan. 1996-Dec. 1996 No. (%)**	**Cumulative Total No. (%)**
Homosexual/bisexual	11 (29)	8 (36)	82 (31)	173 (58)	149 (59)	1,744 (62)
IDU (heterosexual)	3 (8)	1 (5)	9 (3)	27 (9)	22 (9)	273 (10)
Homosexual/bisexual IDU	-- (--)	1 (5)	11 (4)	25 (8)	15 (6)	337 (12)
Lesbian/bisexual IDU	-- (--)	-- (--)	-- (--)	1 (--)	-- (--)	5 (--)
Coagulation Disorders	7 (18)	5 (23)	73 (28)	9 (3)	7 (3)	62 (2)
Heterosexual	10 (26)	5 (23)	38 (15)	40 (13)	27 (11)	236 (8)
Blood transfusion	3 (8)	1 (5)	36 (14)	2 (1)	2 (1)	36 (1)
Other/undetermined	4 (11)	1 (5)	13 (5)	23 (8)	31 (12)	142 (5)
TOTAL	**38 (100)**	**22 (100)**	**262 (100)**	**300 (100)**	**253 (100)**	**2,835 (100)**

Table 5. AIDS cases by gender, age at diagnosis, and race/ethnicity, reported through December 31, 1996 in California.

Male Age at Diagnosis-- Years	White No. (%)	Black No. (%)	Hispanic No. (%)	Asian/ Pacific Is. No. (%)	Native American No. (%)	Not Specified No. (%)	TOTAL No. (%)
0-4	45 (--)	61 (--)	65 (--)	4 (--)	2 (1)	-- (--)	177 (--)
5-12	39 (--)	26 (--)	34 (--)	4 (--)	-- (--)	-- (--)	103 (--)
13-19	67 (--)	31 (--)	90 (1)	8 (--)	2 (1)	-- (--)	198 (--)
20-24	1,191 (2)	406 (3)	797 (5)	52 (3)	11 (3)	6 (4)	2,463 (3)
25-29	6,628 (11)	1,797 (13)	3,018 (18)	228 (13)	70 (20)	24 (15)	11,765 (13)
30-34	13,202 (22)	3,115 (23)	4,166 (25)	378 (22)	97 (27)	32 (20)	20,990 (23)
35-39	13,654 (23)	3,119 (23)	3,388 (21)	379 (22)	88 (25)	40 (25)	20,668 (22)
40-44	10,579 (18)	2,294 (17)	2,236 (14)	319 (18)	40 (11)	26 (16)	15,494 (17)
45-49	6,622 (11)	1,318 (10)	1,177 (7)	183 (11)	21 (6)	13 (8)	9,334 (10)
50-54	3,683 (6)	730 (5)	650 (4)	77 (4)	10 (3)	8 (5)	5,158 (6)
55-59	2,034 (3)	367 (3)	393 (2)	54 (3)	9 (3)	8 (5)	2,865 (3)
60-64	1,097 (2)	202 (1)	198 (1)	22 (1)	3 (1)	1 (1)	1,523 (2)
65 or older	847 (1)	132 (1)	150 (1)	25 (1)	2 (1)	3 (2)	1,159 (1)
Subtotal	59,688 (100)	13,598 (100)	16,362 (100)	1,733 (100)	355 (100)	161 (100)	91,897 (100)
Female Age at Diagnosis-- Years	**White No. (%)**	**Black No. (%)**	**Hispanic No. (%)**	**Asian/ Pacific Is. No. (%)**	**Native American No. (%)**	**Not Specified No. (%)**	**TOTAL No. (%)**
0-4	50 (2)	62 (3)	74 (5)	4 (2)	3 (6)	1 (14)	194 (3)
5-12	26 (1)	15 (1)	17 (1)	3 (2)	-- (--)	-- (--)	61 (1)
13-19	22 (1)	21 (1)	18 (1)	3 (2)	-- (--)	-- (--)	64 (1)
20-24	126 (5)	112 (5)	126 (9)	5 (3)	3 (6)	-- (--)	372 (6)
25-29	366 (15)	300 (13)	268 (19)	22 (12)	8 (17)	-- (--)	964 (15)
30-34	527 (21)	438 (20)	277 (19)	26 (14)	12 (25)	2 (29)	1,282 (20)
35-39	429 (17)	492 (22)	240 (17)	40 (22)	8 (17)	1 (14)	1,210 (19)
40-44	338 (14)	359 (16)	168 (12)	21 (11)	5 (10)	1 (14)	892 (14)
45-49	220 (9)	217 (10)	92 (6)	23 (12)	3 (6)	1 (14)	556 (9)
50-54	102 (4)	85 (4)	63 (4)	12 (6)	4 (8)	-- (--)	266 (4)
55-59	65 (3)	65 (3)	51 (4)	9 (5)	1 (2)	-- (--)	191 (3)
60-64	64 (3)	31 (1)	27 (2)	7 (4)	-- (--)	-- (--)	129 (2)
65 or older	153 (6)	27 (1)	26 (2)	11 (6)	1 (2)	1 (14)	219 (3)
Subtotal	2,488 (100)	2,224 (100)	1,447 (100)	186 (100)	48 (100)	7 (100)	6,400 (100)
TOTAL	**62,176**	**15,822**	**17,809**	**1,919**	**403**	**168**	**98,297**

Table 6. AIDS cases, deaths, and case-fatality rates by half-year of diagnosis through December 31, 1996 in California.

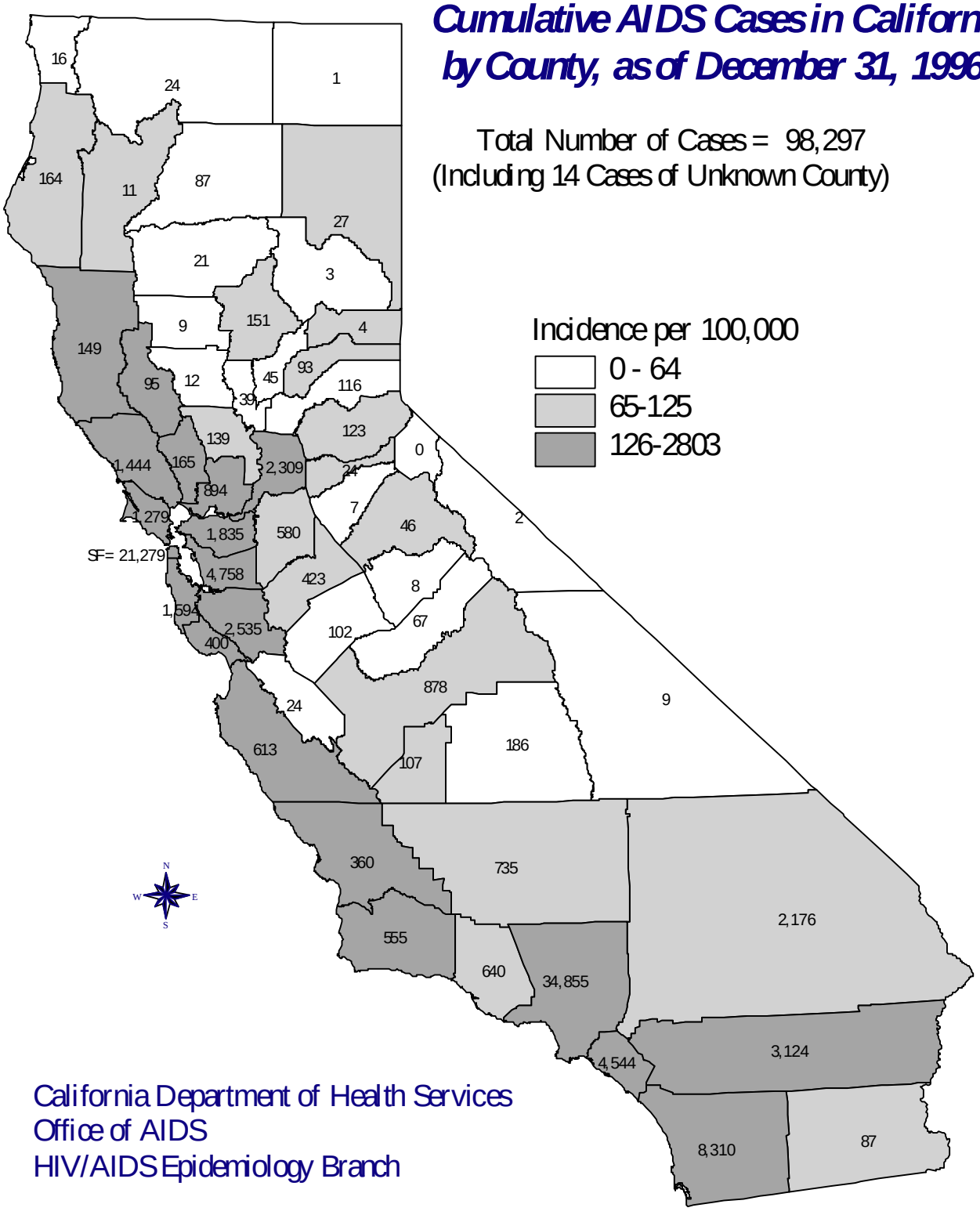
Half-Year of Diagnosis	Number of Cases	Number of Deaths	Case Fatality Rate
Before 1983	300	285	95%
1983 Jan-June	297	287	97%
July-Dec	410	393	96%
1984 Jan-June	588	568	97%
July-Dec	815	781	96%
1985 Jan-June	1,156	1,115	96%
July-Dec	1,423	1,362	96%
1986 Jan-June	1,832	1,766	96%
July-Dec	2,232	2,126	95%
1987 Jan-June	2,744	2,614	95%
July-Dec	2,878	2,696	94%
1988 Jan-June	3,253	3,019	93%
July-Dec	3,351	3,034	91%
1989 Jan-June	3,946	3,500	89%
July-Dec	3,866	3,396	88%
1990 Jan-June	4,465	3,769	84%
July-Dec	4,400	3,696	84%
1991 Jan-June	5,238	4,196	80%
July-Dec	6,061	4,607	76%
1992 Jan-June	6,445	4,434	69%
July-Dec	6,348	4,026	63%
1993 Jan-June	6,421	3,501	55%
July-Dec	5,608	2,578	46%
1994 Jan-June	5,442	2,061	38%
July-Dec	4,684	1,366	29%
1995 Jan-June	4,808	1,016	21%
July-Dec	3,965	617	16%
1996 Jan-June	3,584	386	11%
July-Dec	1,737	118	7%
TOTAL	**98,297**	**63,313**	**64%**

Table 7. AIDS Cases and Cumulative Incidence 1981 through December 31, 1996 in California.

County	AIDS Cases	Deaths	Case Fatality Rate (%)	Incidence Per 100,000	County	AIDS Cases	Deaths	Case Fatality Rate (%)	Incidence Per 100,000
Alameda	4,758	3,036	63.8%	341.54	**Orange**	4,544	2,611	57.5%	167.51
Berkeley	459	304	66.2%	437.56	**Placer**	116	60	51.7%	53.10
Alpine	--	--	--	--	**Plumas**	3	2	66.7%	13.74
Amador	24	17	70.8%	72.27	**Riverside**	3,124	1,699	54.4%	201.36
Butte	151	104	68.9%	74.08	**Sacramento**	2,309	1,503	65.1%	189.88
Calaveras	7	5	71.4%	15.99	**San Benito**	24	10	41.7%	54.12
Colusa	12	11	91.7%	62.38	**San Bernardino**	2,176	1,262	58.0%	122.29
Contra Costa	1,835	1,170	63.8%	201.74	**San Diego**	8,310	5,177	62.3%	304.84
Del Norte	16	8	50.0%	51.85	**San Francisco**	21,279	14,920	70.1%	2,803.65
El Dorado	123	77	62.6%	78.12	**San Joaquin**	580	374	64.5%	103.29
Fresno	878	544	62.0%	106.09	**San Luis Obispo**	360	175	48.6%	155.66
Glenn	9	6	66.7%	31.57	**San Mateo**	1,594	987	61.9%	224.19
Humboldt	164	97	59.1%	124.60	**Santa Barbara**	555	398	71.7%	139.47
Imperial	87	43	49.4%	64.94	**Santa Clara**	2,535	1,561	61.6%	155.54
Inyo	9	7	77.8%	46.13	**Santa Cruz**	400	247	61.8%	166.00
Kern	735	354	48.2%	108.14	**Shasta**	87	67	77.0%	48.94
Kings	107	53	49.5%	94.73	**Sierra**	4	4	100.0%	119.40
Lake	95	52	54.7%	154.72	**Siskiyou**	24	14	58.3%	51.11
Lassen	27	7	25.9%	100.54	**Solano**	894	510	57.0%	215.27
Los Angeles	34,855	22,877	65.6%	361.70	**Sonoma**	1,444	912	63.2%	328.11
Long Beach	3,062	1,946	63.6%	699.41	**Stanislaus**	423	245	57.9%	93.41
Pasadena	533	333	62.5%	396.58	**Sutter**	39	25	64.1%	49.10
Madera	67	38	56.7%	59.42	**Tehama**	21	11	52.4%	35.65
Marin	1,279	656	51.3%	529.90	**Trinity**	11	8	72.7%	77.64
Mariposa	8	2	25.0%	44.95	**Tulare**	186	122	65.6%	49.07
Mendocino	149	105	70.5%	164.21	**Tuolumne**	46	27	58.7%	82.09
Merced	102	63	61.8%	47.57	**Ventura**	640	408	63.8%	86.89
Modoc	1	1	100.0%	9.23	**Yolo**	139	85	61.2%	87.57
Mono	2	1	50.0%	18.48	**Yuba**	45	29	64.4%	64.49
Monterey	613	371	60.5%	161.12	**Unknown**	14	3	21.4%	
Napa	165	104	63.0%	136.86					
Nevada	93	48	51.6%	96.57	**TOTAL**	**98,297**	**63,313**	**64.4%**	**292.22**

Cumulative AIDS Cases in California by County, as of December 31, 1996

Total Number of Cases = 98,297
(Including 14 Cases of Unknown County)



California Department of Health Services
Office of AIDS
HIV/AIDS Epidemiology Branch

MEETINGS/ANNOUNCEMENTS

April 30 - May 2, 1997 Eighteenth Annual Advances in Infectious Diseases Conference, San Francisco, CA. Sponsored by the University of California, San Francisco. For more information, contact the Office of Continuing Medical Education, 415-476-5208.

June 6, 1997 11th Annual AIDS Update for Primary Care: Moving Forward, New Rays of Hope, Mills College, Oakland, CA. Sponsored by Alta Bates Medial Center, East Bay AIDS Center, and the East Bay AIDS Education & Training Center. For more information, contact Alta Bates Medical Education Department 510-204-3884.

September 25 - 28, 1997 4th Western Regional Conference on HIV, AIDS & Women, La Jolla Marriott Hotel, San Diego, CA. Sponsored by the University of California, San Diego (UCSD). For more information, contact UCSD, Office of Continuing Medical Education, 619-534-3940 (phone) or 619-534-7672 (fax).

June 28 - July 3, 1998 12th World AIDS Conference, Geneva, Switzerland. Sponsored by the International AIDS Society. For more information contact C/o Congrex(Sweden)AB, P. O. Box 5619, S-114 86 Stockholm, Sweden, +46 8 612 69 00 (phone) +46 8 612 62 92 (fax), aids98@congrex.se (email) or http://www.aids98.ch (Internet).

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